Obesity and the Built Environment:

Improving Public Health Through Community Design

• May 24-26, 2004 • Marriott Wardman Park Hotel, Washington, DC •

National Institute of Environmental Health Sciences, National Institutes of Health

Samuel H. Wilson, M.D., Deputy Director

Department of Health and Human Services
National Institutes of Health
National Institute of Environmental Health Sciences

OBESITY

- Obesity and overweight are among the most important health challenges of our time and have reached epidemic proportions:

  65% of Americans overweight and 1 in 3 obese;

  increased risk of cardiovascular disease, cancer, and diabetes, among other diseases;

  medical costs associated with overweight and obesity may exceed $76 billion annually.

OBESITY AND ENVIRONMENT

- Obesity arises in part from individual behavior, i.e., failure to balance consumption and activity.
- Surgeon General's call to action to prevent and decrease overweight and obesity, 2001:
  - "Environmental factors…provide the greatest opportunity for actions and interventions designed for prevention."
- Local communities have a role:
  - Safe places to play and exercise.
  - School locations, lunches, and physical education programs.
  - Zoning, planning, and architectural regulations.
  - Modes of transportation.

OBESITY

- Obesity, like most chronic health problems, is caused by complex interactions between genetic and environmental factors.

BEHAVIOR: Historical; cultural/social; psychological; convenience.

These behavioral patterns are being passed along to our children. Obesity in children has escalated at an alarming rate.

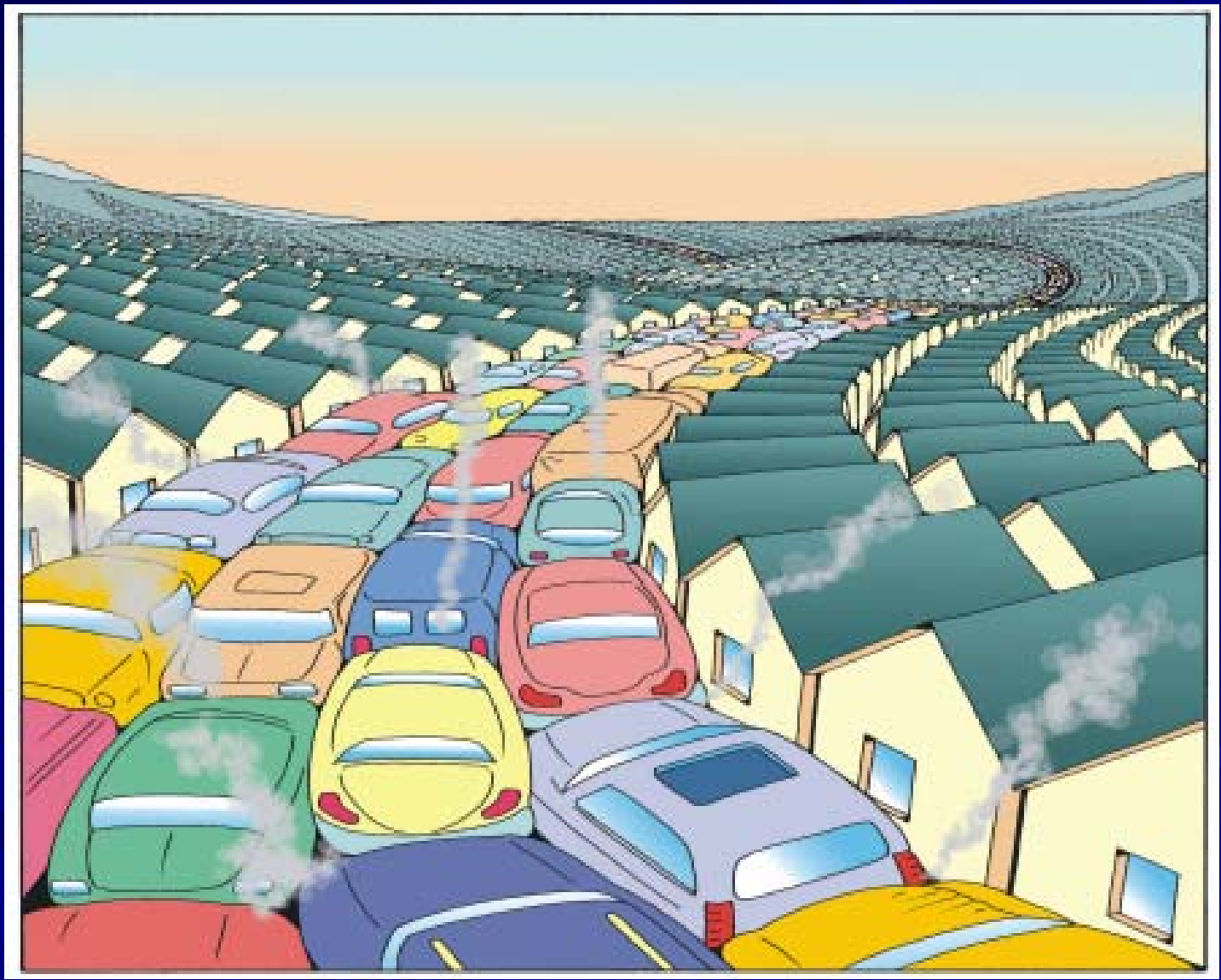
BUILT ENVIRONMENT: Our built environment promotes sedentary lifestyles, and there are many other associated health challenges.

What do we mean by "built environment?"

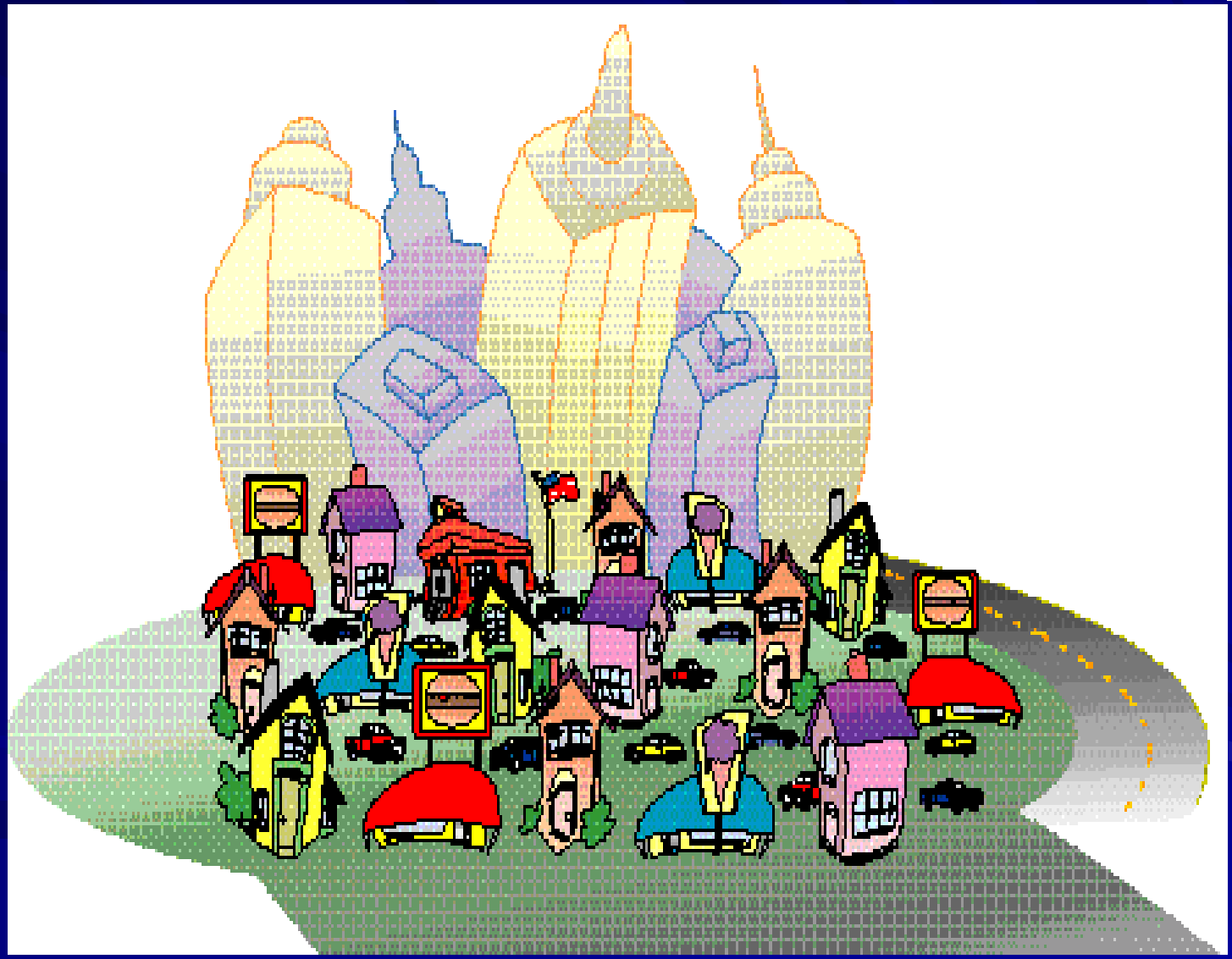
Those aspects of environment that are human-modified, such as homes, schools, workplaces, parks, industrial areas, and highways.

Challenges related to built environment pertain to transportation, urban sprawl, air pollution, city planning, and diminishing natural resources.

People live in the suburbs:



People live and work in the cities:



SOLUTION

- If we can better understand linkages between obesity and the built environment, we can then create communities and workplaces that promote health and well being.

Source: 2001 Workshop "Rebuilding the Unity of Health and the Environment" by the Institute of Medicine's Roundtable on Environmental Health Sciences, Research, and Medicine

SOME CONFERENCE GOALS

- Identify research and practice agendas to examine the relationship between the built environment and obesity.
- Partner researchers, planners, health care providers, developers, policy makers, community and business leaders.
- Highlight evidence-based strategies for intervention.
- Enhance interagency coordination.

Obesity and the Built Environment:

Improving Public Health Through Community Design

• May 24-26, 2004 • Marriott Wardman Park Hotel, Washington, DC •

National Institute of Environmental Health Sciences, National Institutes of Health

Dr. Elias A. Zerhouni
Director
National Institutes of Health
Department of Health and Human Services

Obesity and the Built Environment:

Improving Public Health Through Community Design

• May 24-26, 2004 • Marriott Wardman Park Hotel, Washington, DC •

National Institute of Environmental Health Sciences, National Institutes of Health

Obesity and the Built Environment:

Improving Public Health Through Community Design

May 24-26, 2004 • Wardman Park Hotel • Washington, DC

NIEHS

NATIONAL INSTITUTES OF HEALTH

DEPARTMENT OF HEALTH & HUMAN SERVICES • USA

Secretary of the Department of Health and Human Services (DHHS), The Honorable Tommy Thompson

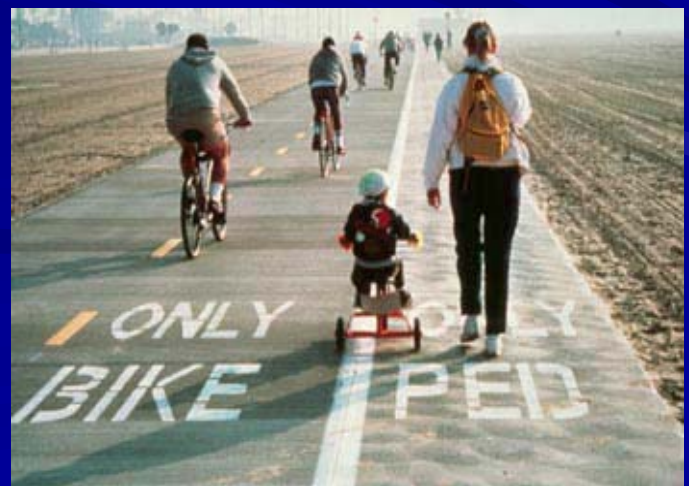
Former Secretary of DHHS,
The Honorable Louis Sullivan

Former Surgeon General and Assistant Secretary of DHHS, Dr. David Satcher

Director, National Institutes of Health (DHHS),
Dr. Elias Zerhouni

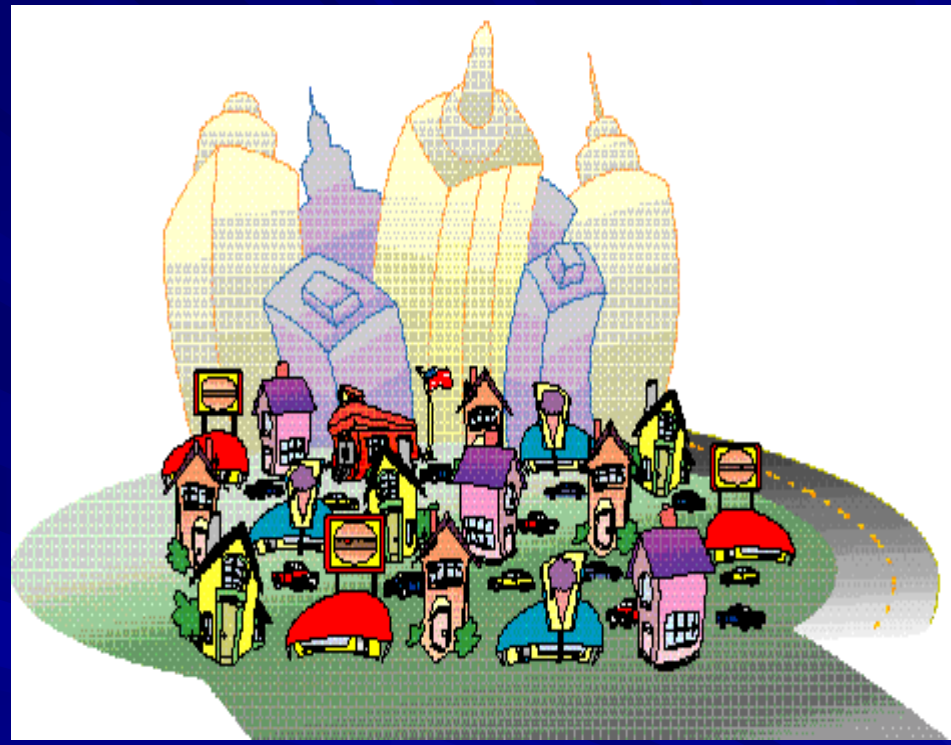
OBESITY

- Obesity and overweight are among the most important health challenges of our time and have reached epidemic proportions.
- Obesity, like most chronic health problems, is caused by complex interactions between genetic, environmental and behavioral factors.
- Obesity in adults, particularly abdominal or upper-body obesity, is associated with increased risk of a number of diseases.
- Obesity increases the rate of disease, disability, and health care expenditures, while decreasing productivity and quality of life.



BUILT ENVIRONMENT

- Those aspects of environment that are human-modified, such as homes, schools, workplaces, parks, industrial areas, farms, and highways.
- Challenges related to the built environment pertain to transportation, urban sprawl, air pollution, city planning, and diminishing natural resources.



Source: Rebuilding the Unity of Health and the Environment, IOM Environmental Health Sciences Roundtable, 2001.

A LOOK AT THE PROBLEM

- **The Problem:**

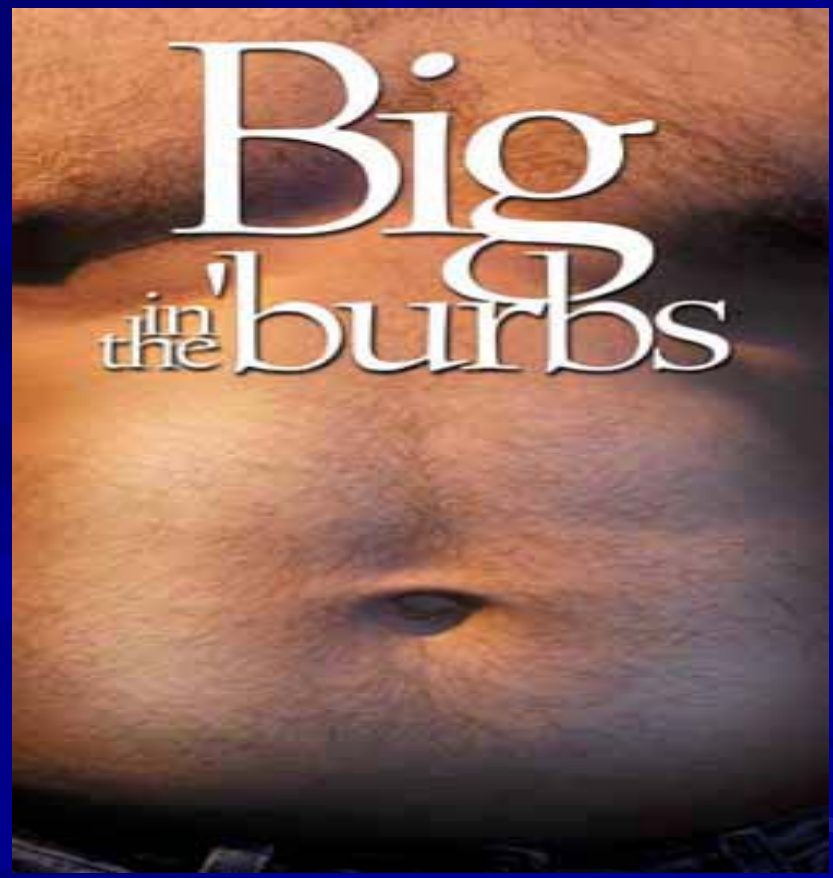
  64% Overweight and 1 in 3 Obese

- **The Public Health Burden:**

  CVD, Cancer, Diabetes

- **The Economic Burden:**

  Medical costs associated with overweight and obesity may exceed $76 billion annually.



GOALS

- Identify research opportunities to examine the relationship between built environment and obesity.
- Highlight evidence-based strategies for intervention.
- Enhance interagency coordination.
- Partner researchers, planners, health care providers, developers, policy makers, and community and business leaders.

Obesity and the Built Environment:

Improving Public Health Through Community Design

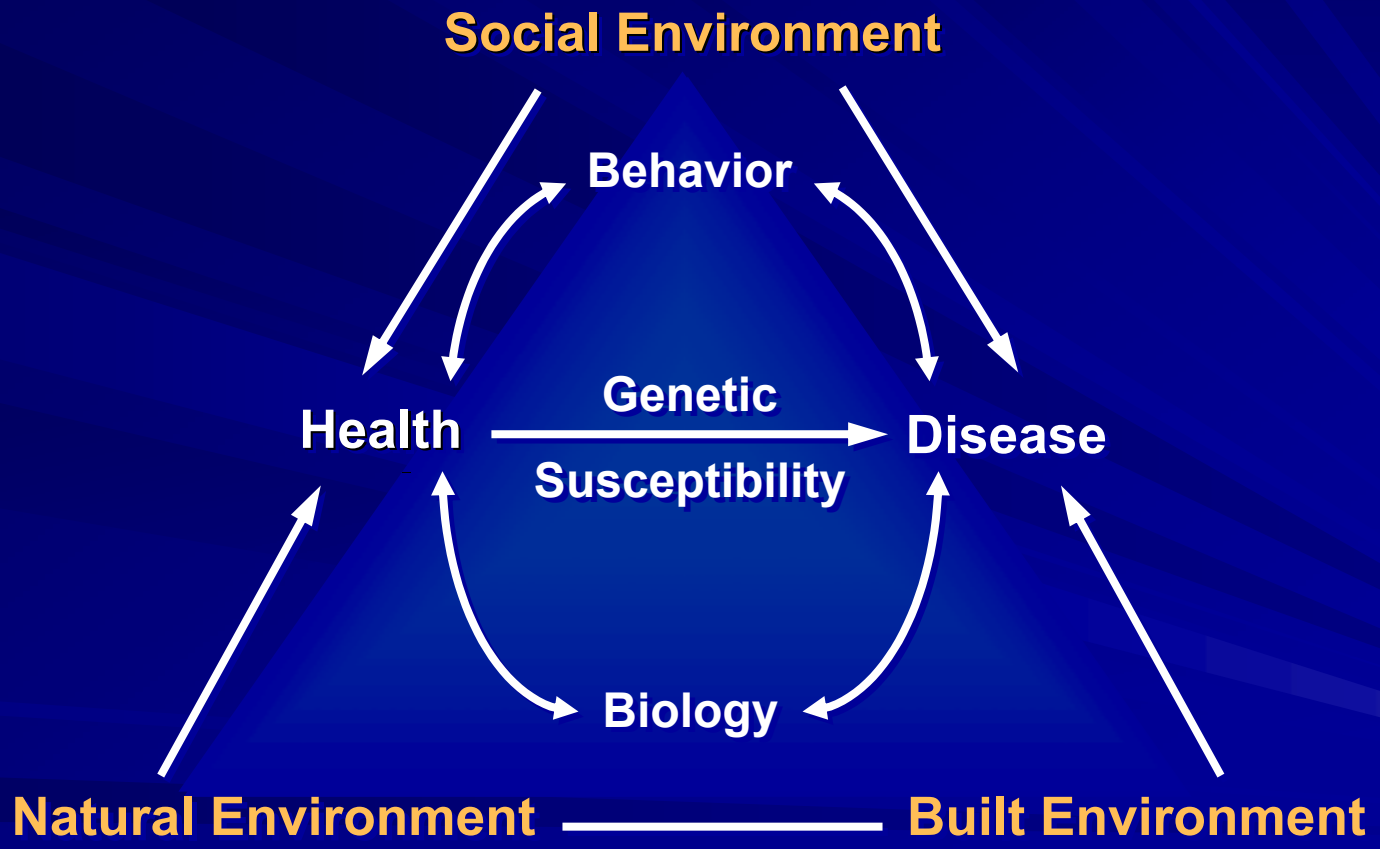
May 24-26, 2004 • Wardman Park Hotel • Washington, DC

CROSS CUTTING THEMES

Consider built environment-obesity links at different levels and settings:

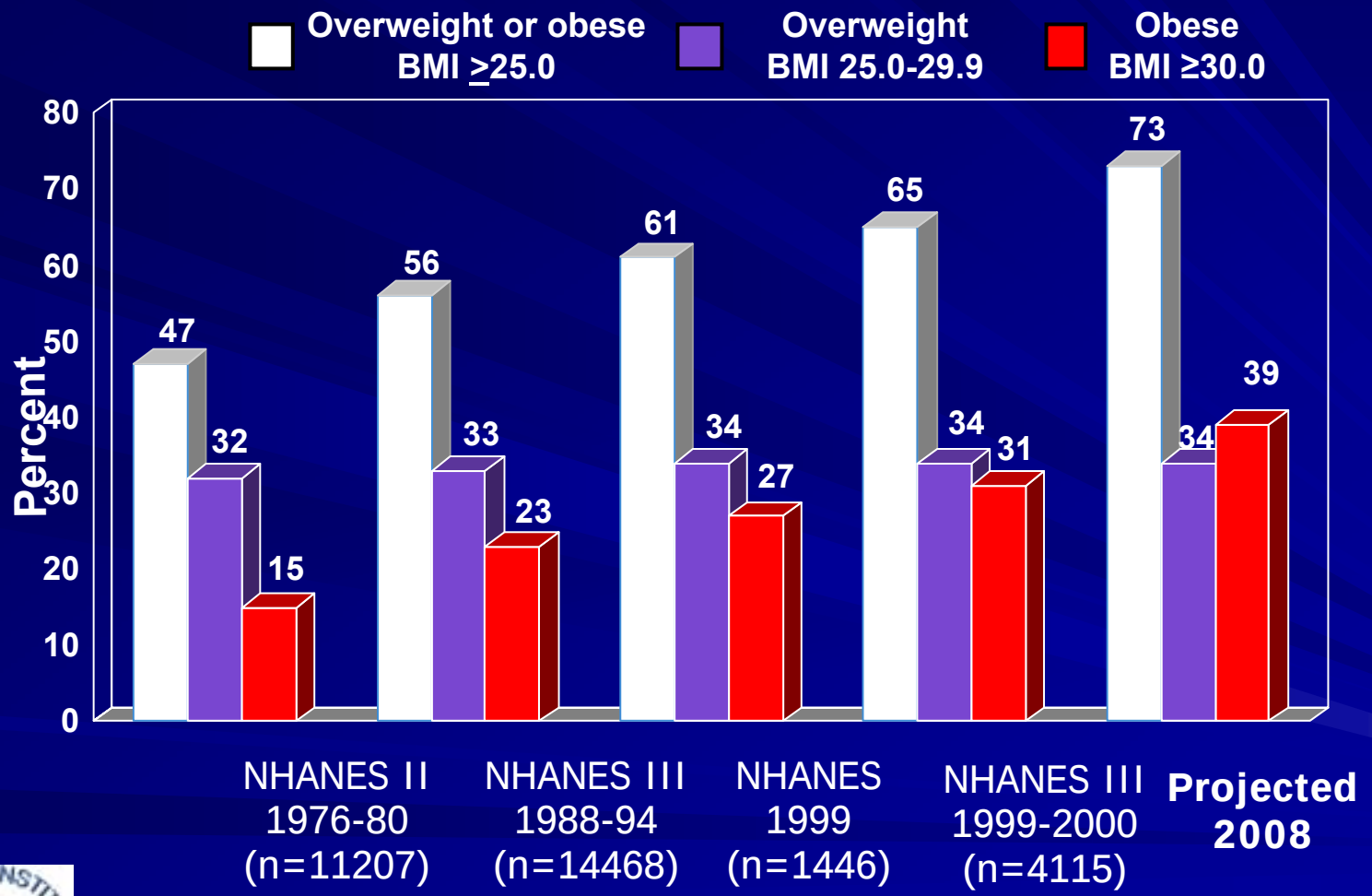
- Families and communities (urban/suburban/rural residences)
- Children and schools
- Employees/ers and worksites

Complex Environmental Health Problems Require an Integrated Multi-level Response Strategy



Source: 2001 Workshop "Rebuilding the Unity of Health and the Environment" by the IOM's Roundtable on Environmental Health Sciences, Research, and Medicine

Prevalence of Overweight and Obesity Among US Adults, Age 20-74 Years*



BMI = body mass index.

*Age-adjusted by the direct method to the year 2000 U.S. Bureau of the Census using the age groups 20-34, 35-44, 45-54, 55-64, and 65-74 years.

OBESITY

- Obesity and overweight are among the most important health challenges of our time and have reached epidemic proportions.

- Obesity, like most chronic health problems, is caused by complex interactions between genetic, environmental and behavioral factors.